


AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A device for recording hand-written information in the form of characters, symbols, graphs, drawings, calligraphy and similar hand-written information defined by a hand movement, comprising:

recording means ~~(3)~~ which are adapted to be moved by a hand which carries out the hand movement and to record a plurality of images with partially overlapping contents while the recording means are being moved; ~~characterised in that the device further comprises and~~

 image-processing means ~~(4)~~ which are adapted to determine the relative positions of the images with the aid of the partially overlapping contents for providing a description in digital format of how the recording means have been moved ~~and, in this way, a digital representation of the hand-written information and to store the hand-written information by storing the description of how the recording means have been moved.~~

2. (Cancelled).

3. (Currently Amended) A device according to claim 1 ~~or 2~~, wherein said description comprises a plurality of movement vectors each indicating how the recording means have been moved between the recording of two images.

4. (Currently Amended) A device according to claim 1, ~~2 or 3~~, wherein said description comprises turning indications, each indicating how the recording means have been turned between the recording of two images.

5. (Currently Amended) A device according to ~~any one of the preceding claims~~claim 1, wherein said device is adapted to determine, on the basis of the overlapping contents of the images, the speed at which the recording means have been moved between the recording of two images.

6. (Original) A device according to claim 5, wherein said device is adapted to compare the speed with pre-recorded speed data for checking the authenticity of the inputted information.

02 7. (Currently Amended) A device according to ~~any one of the preceding claims~~claim 1, wherein the hand-written information comprises characters and wherein the image-processing means are further adapted to identify the characters with the aid of the description in digital format and to store the identified characters in character-coded format.

8. (Currently Amended) A device according to ~~any one of the preceding claims~~claim 1, wherein said device has a light-sensitive sensor means ~~(8)~~ with a two-dimensional sensor surface for recording the images.

9. (Currently Amended) A device according to ~~any one of the preceding claims~~claim 8, wherein said image-processing means are adapted to determine the relative position of the images both horizontally and vertically.

10. (Currently Amended) A device according to ~~any one of the preceding claims~~claim 1, wherein the recording means are adapted to be directed, while being moved, at a surface which is imaged with the aid of said plurality of images.

11. (Currently Amended) A device according to ~~any one of the preceding claims~~ claim 1, further comprising tracing means ~~(28)~~ for indicating on the surface the movement of the recording means.

12. (Currently Amended) A device according to claim 11, wherein the tracing means ~~(28)~~ comprise an illumination means which projects light onto the surface.

13. (Currently Amended) A device according to ~~any one of the preceding claims~~ claim 1, wherein the recording means and the image-processing means are arranged in a common casing ~~(1)~~ which is adapted to be moved by the hand carrying out the hand movement.

on 14. (Currently Amended) A device according to ~~any one of claims 1-12~~ claim 1, wherein the recording means are arranged in a first casing and the image-processing means in a second casing.

15. (Currently Amended) A device according to ~~any one of the preceding claims~~ claim 1, wherein the image-processing means comprise a processor ~~(20)~~.

16. (Currently Amended) A device according to ~~any one of the preceding claims~~ claim 1, wherein said device is adjustable to an operational mode in which it is adapted to record predefined information, preferably text, located on an information carrier, by imaging the information with the aid of a plurality of images with partially overlapping contents.

17. (Currently Amended) A device according to ~~any one of the preceding claims~~ claim 1, wherein said device is adjustable to an operational mode in which it is adapted to image an object located at a distance from the device.

18. (Currently Amended) A device according to ~~any one of the preceding claims~~ claim 1, further comprising a transceiver ~~(26)~~ for wireless communication with an external unit.

19. (Currently Amended) A method of recording hand-written information in the form of characters, symbols, graphs, drawings, calligraphy and similar hand-written information defined by a hand movement, comprising: ~~the steps of~~

[[-]]moving a device with a hand which is carrying out the hand movement;

[[-]]recording a plurality of images with overlapping contents while moving the device; and

[[-]]determining the relative positions of the images with the aid of the partially overlapping contents for providing a description in digital format of how the device has been moved, and, ~~in this way, a digital representation of the hand-written information~~

storing the hand-written information by storing the description of how the device has been moved.

20. (Currently Amended) A method according to claim 19, wherein the information defined by a hand movement comprises characters and further comprising ~~the steps of~~ identifying the characters with the aid of the description and storing them in character-coded digital format.

21. (Currently Amended) A method of determining ~~the~~ a position of a hand-held device which is adapted to record a plurality of images while it is being moved, ~~characterised~~ comprising:

~~in that the images are recorded~~ recording the images with
partially overlapping contents,
determining the relative positions of the images,
and using the relative positions for ~~which are used for~~
determining the position of the device.

22. (New) A device according to claim 1, further comprising display means for reproducing the hand-written information based on the description of how the recording means have been moved.

23. (New) A method according to claim 19, further comprising displaying the handwritten information based on the description of how the device has been moved.

Or 24. (New) A method according to claim 19, further comprising determining, on the basis of the overlapping contents of the images, the speed at which the device has been moved between the recording of two images.

25. (New) A method according to claim 24, further comprising comparing the speed with pre-recorded speed data for checking the authenticity of the handwritten information.

26. (New) A method according to claim 19, further comprising indicating on the surface the movement of the device.

27. (New) A method according to claim 19, further comprising recording pre-existing information on an information carrier by imaging the information with the aid of a plurality of images with partially overlapping contents.

28. (New) A method according to claim 27, further comprising adjusting the device from a first operational mode for recording the handwritten information to a second operational mode for recording the pre-existing information.

29. (New) The method of claim 19, further comprising:
determining, based on the description of how the device has been moved, the handwritten character.

30. (New) A device for recording hand-written information comprising:

a recorder adapted to be moved by a hand which carries out the hand movement and to record a plurality of images with partially overlapping contents while the recorder is being moved; and

an image-processor adapted to determine the relative positions of the images with the aid of the partially overlapping contents for providing a description in digital format of how the recorder has been moved and to store the hand-written information by storing the description of how the recorder has been moved.

31. (New) A device according to claim 30, wherein said description comprises a plurality of movement vectors each indicating how the recorder has been moved between the recording of two images.

32. (New) A device according to claim 30, wherein said description comprises turning indications, each indicating how the recorder has been turned between the recording of two images.

33. (New) A device according to claim 30, wherein said device is adapted to determine, on the basis of the overlapping contents

of the images, the speed at which the recorder has been moved between the recording of two images.

34. (New) A device according to claim 33, wherein said device is adapted to compare the speed with pre-recorded speed data for checking the authenticity of the inputted information.

35. (New) A device according to claim 30, wherein the hand-written information comprises characters and wherein the image-processor is further adapted to identify the characters with the aid of the description in digital format and to store the identified characters in character-coded format.

36. (New) A device according to claim 30, wherein said device has a light-sensitive sensor with a two-dimensional sensor surface for recording the images.

On 37. (New) A device according to claim 36, wherein said image-processor is adapted to determine the relative position of the images both horizontally and vertically.

38. (New) A device according to claim 30, wherein the recorder is adapted to be directed, while being moved, at a surface which is imaged with the aid of said plurality of images.

39. (New) A device according to claim 30, further comprising a tracer for indicating on the surface the movement of the recorder.

40. (New) A device according to claim 39, wherein the tracer comprises an illuminator which projects light onto the surface.

41. (New) A device according to claim 30, wherein the recorder and the image-processor are arranged in a common casing which is adapted to be moved by the hand carrying out the hand movement.

42. (New) A device according to claim 30, wherein the recorder is arranged in a first casing and the image-processor in a second casing.

43. (New) A device according to claim 30, wherein the image-processor comprises a processor.

44. (New) A device according to claim 30, wherein said device is adjustable to an operational mode in which it is adapted to record predefined information located on an information carrier, by imaging the information with the aid of a plurality of images with partially overlapping contents.

45. (New) A device according to claim 30, wherein said device is adjustable to an operational mode in which it is adapted to image an object located at a distance from the device.

46. (New) A device according to claim 30, further comprising a transceiver for wireless communication with an external unit.

47. (New) A device according to claim 30, further comprising a display for reproducing the hand-written information based on the description of how the recorder has been moved.
